

IN THE CLAIMS

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1. (Currently Amended) A method for three-dimensional identification of an object having an object surface, said method comprising the steps of:

illuminating a digital micro-mirror arrangement via a light source;

successively projecting a number of encoded illumination patterns by driving said digital micro-mirror arrangement to sequentially illuminate said object surface, with the digital micro-mirror arrangement being sequentially illuminated with at least three colors in a beam path through a variable color filter onto said object surface for identification of at least three depth planes of said object in a single image;

registering said image of said object with a color camera from a direction different from said beam path; and

calculating a high precision topography of said object surface from said registration in a control and evaluation unit, the calculating including the use of at least triangulation principles.

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2. (Previously Presented) The method according to claim 1, wherein said encoded illumination patterns comprise a stripe pattern having successively varied periodicity.

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3. (Previously Presented) The method according to claim 1, wherein said method is used for face identification.